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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,876	09/29/2003	Ravi Varma	ECOT.01USF1	5820
27479	7590	04/27/2004	EXAMINER	
COCHRAN FREUND & YOUNG LLC 3555 STANFORD ROAD SUITE 230 FORT COLLINS, CO 80525			LEUNG, PHILIP H	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 04/27/2004.

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,876

Applicant(s)

VARMA, RAVI

Examiner

Philip H Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. New formal drawings are required in this application because only informal drawings were filed on 9-29-2003. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The formal drawings are required in reply to the Office action to avoid abandonment of the application.

2. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,646,241 in view of Kural (WO 03/048443) or Matsushita (JP 63-277095). Claim 1 in this C-I-P application includes all the claimed elements of claim 1 in the parent patent which is directed to "a sterilization apparatus comprising in combination: (a) a sealed first chamber capable of withstanding internal pressure and vacuum and having a sealable opening for introducing and removing articles to be sterilized; (b) at least one tray disposed within said first chamber for holding items to be sterilized; (c) a first microwave radiation generator; (d) a first waveguide for directing microwave radiation generated by said first microwave radiation generator onto the articles to be sterilized; (e) a sprayer for directing droplets of water onto the articles to be sterilized; (f) means for generating steam at greater than one atmosphere of pressure and for introducing the steam into said first chamber; and (g) a pump for evacuating said first chamber before the steam is introduced thereto and for removing the steam after the sterilization process is completed" and an additional element "(h) means for detecting arcing in said first chamber and for shutting down said first

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microwave radiation generator in response thereto". However, Kural shows that it is well known in the art of microwave appliances to use a detector 5 to detect arcing within the appliance housing 2 and a control unit 6 to control the microwave generator 4 (see Figures 1 and 2 and pages 2 and 3). Matsushita also shows the use of an arc spark detector 18 in a microwave dryer to control the operation of the magnetron (see Figures 1-3 and the English abstract). It would have been obvious to one of ordinary skill in the art to modify the parent patent to use an arc detector to control the microwave generation according to an arcing condition for a safer microwave appliance, in view of the teaching of Kural or Matsushita.

3. Claims 2 and 3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,646,241 in view of Kural (WO 03/048443) or Matsushita (JP 63-277095), as applied to claim 1 above, and further in view of Weinberg (US 6,042,637). Varma et al combined with Kural or Matsushita shows and claims a sterilization device including every feature except for the use of a HEPA filter.

Weinberg shows that it is known to use a HEPA filter 14 to clean the air by removing both particulates and pathogen in food heating and sterilizing devices (see Figures 2, 3, 5 and 8-10 and col. 4, lines 19-53 and col. 7, lines 38-67). It would have been further obvious to one of ordinary skill in the art to modify the parent patent to use a HEPA filter in the sterilization device to remove pathogens for better cleaning effect, in view of the teaching of Weinberg.

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4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being obvious over Varma et al (US 6,646,241), in view of Kural (WO 03/048443) or Matsushita (JP 63-277095).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in

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accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Varma et al shows “a sterilization apparatus comprising in combination: (a) a sealed first chamber capable of withstanding internal pressure and vacuum and having a sealable opening for introducing and removing articles to be sterilized; (b) at least one tray disposed within said first chamber for holding items to be sterilized; (c) a first microwave radiation generator; (d) a first waveguide for directing microwave radiation generated by said first microwave radiation generator onto the articles to be sterilized; (e) a sprayer for directing droplets of water onto the articles to be sterilized; (f) means for generating steam at greater than one atmosphere of pressure and for introducing the steam into said first chamber; and (g) a pump for evacuating said first chamber before the steam is introduced thereto and for removing the steam after the sterilization process is completed” (see Figures 1 and 2 and claim 1) except for the “(h) means for detecting arcing in said first chamber and for shutting down said first microwave radiation generator in response thereto”. However, Kural shows that it is well known in the art of microwave appliances to use a detector 5 to detect arcing within the appliance housing 2 and a control unit 6 to control the microwave generator 4 (see Figures 1 and 2 and pages 2 and 3). Matsushita also shows the use of an arc spark detector 18 in a microwave dryer to control the operation of the magnetron (see Figures 1-3 and the English abstract). It would have been obvious to one of ordinary skill in the art to modify Varma et al to use an arc detector to control the microwave generation according to an arcing condition for a safer microwave appliance, in view of the teaching of Kural or Matsushita.

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7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varma et al (US 6,646,241), in view of Kural (WO 03/048443) or Matsushita (JP 63-277095), as applied to claim 1 above, and further in view of Weinberg (US 6,042,637).

Varma et al combined with Kural or Matsushita shows a sterilization device including every feature as claimed except for the use of a HEPA filter. Weinberg shows that it is known to use a HEPA filter 14 to clean the air by removing both particulates and pathogen in food heating and sterilizing devices (see Figures 2, 3, 5 and 8-10 and col. 4, lines 19-53 and col. 7, lines 38-67). It would have been further obvious to one of ordinary skill in the art to modify Varma et al to use a HEPA filter in the sterilization device to remove pathogens for better cleaning effect, in view of the teaching of Weinberg.

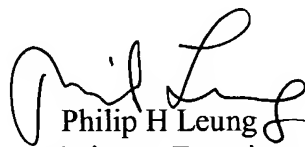
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benson (US 6,180,070) is further cited to show the use of a HEPA filter.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (703) 308-1710.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Pothier can be reached on (703) 308-0265. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
4-26-2004